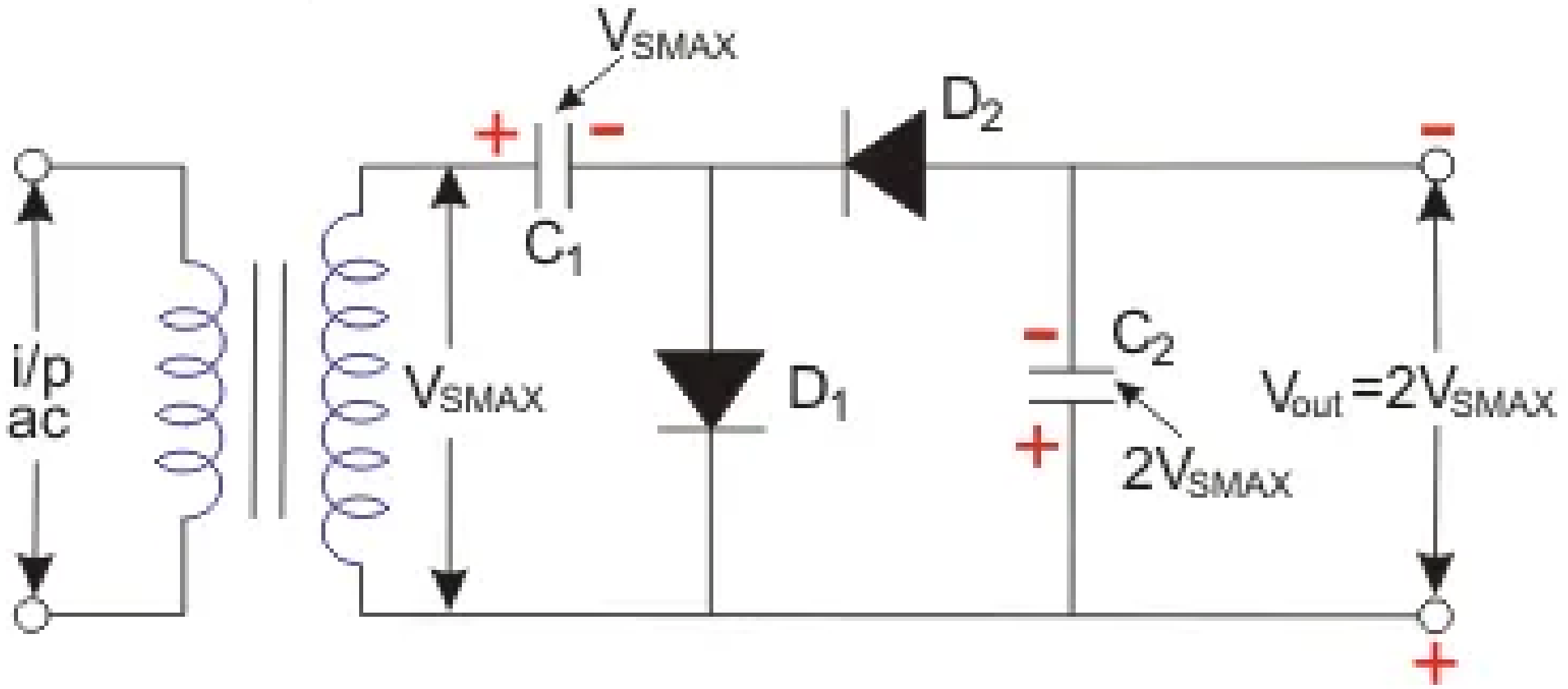
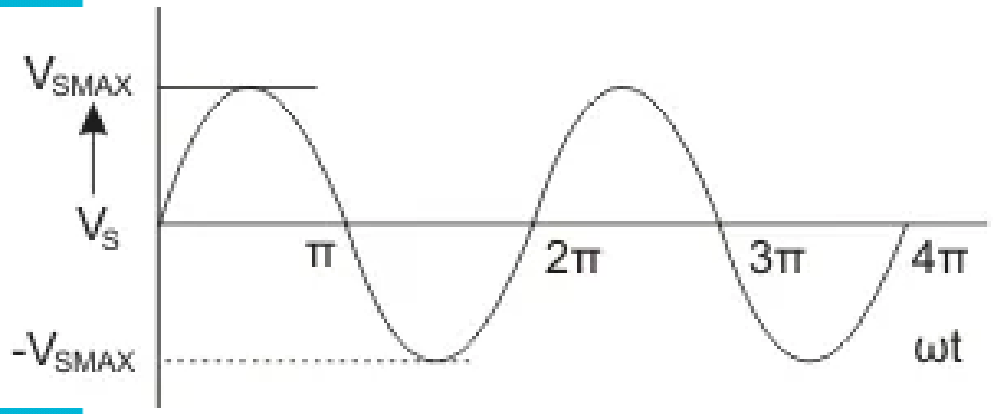
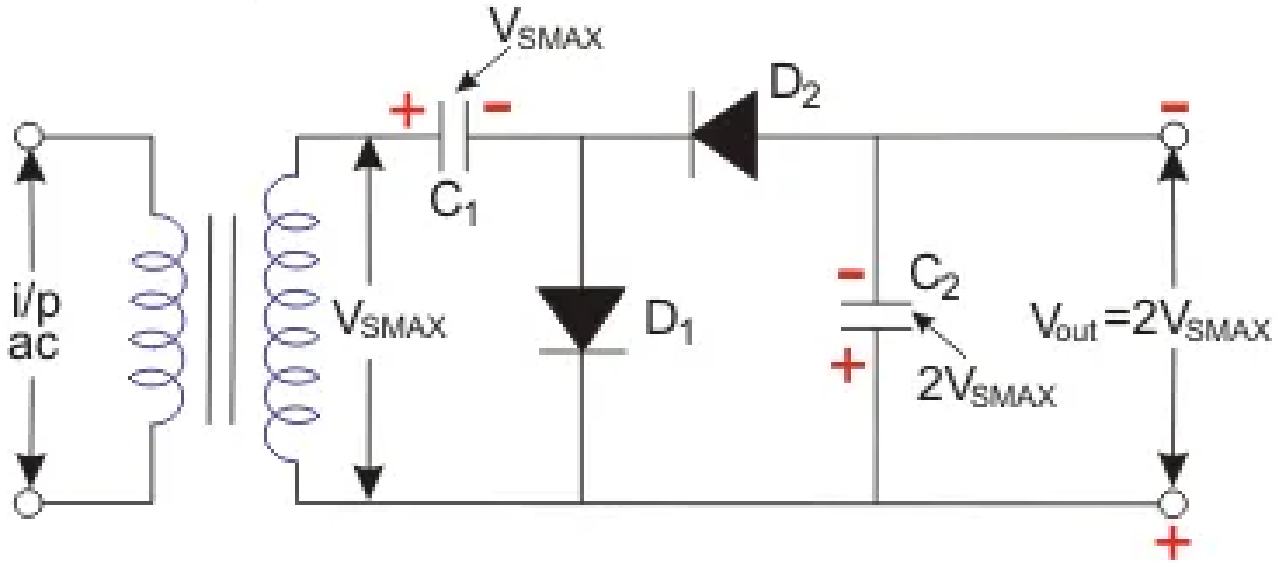
Duplicador de tensión con Diodos

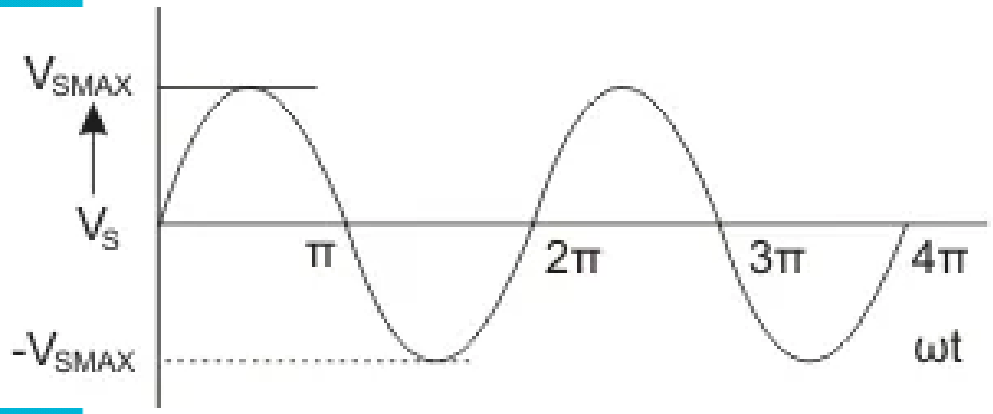
UTEC
UNIVERSIDAD DE INGENIERÍA & TECNOLOGÍA

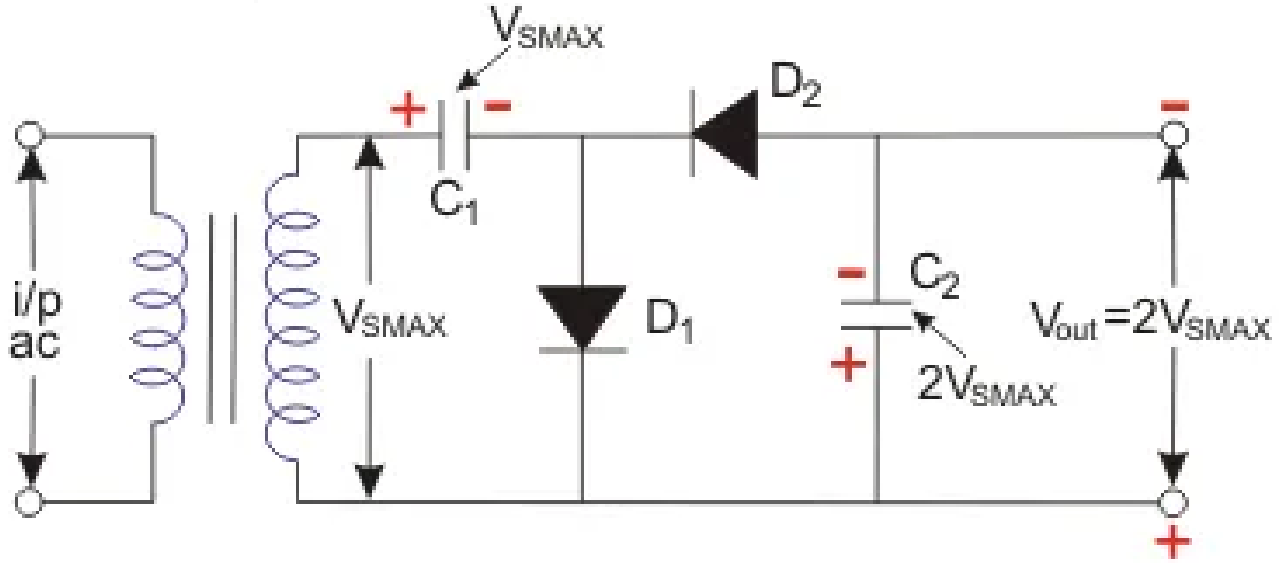

V_{SMAX}
+
−
C_1
D_2
i/p
ac
V_{SMAX}
D_1
−
C_2
+
$2V_{SMAX}$
$V_{out} = 2V_{SMAX}$
−
+





UTEC
UNIVERSIDAD DE INGENIERÍA & TECNOLOGÍA



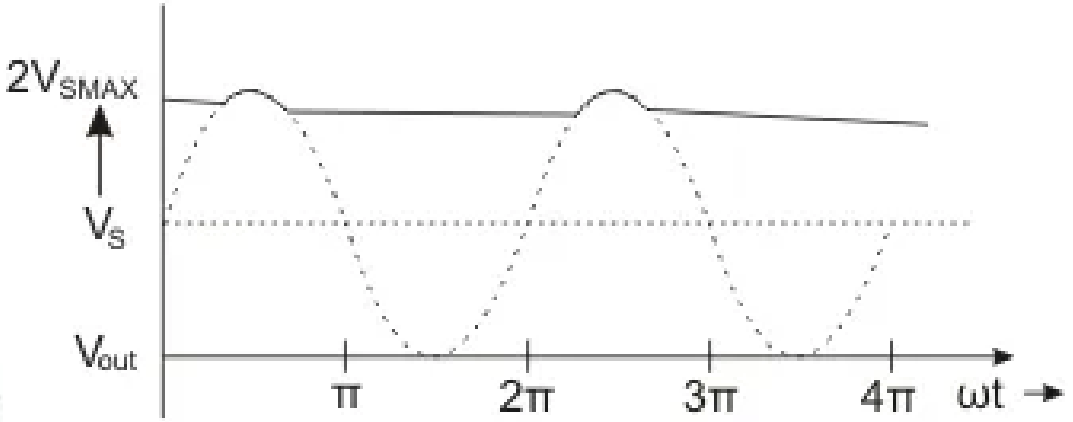


$$-V_{SMAX} - V_{C1} + V_{C2} = 0$$

$$\therefore V_{C2} = V_{SMAX} + V_{C1}$$

$$We\ know\ that\ V_{C1} = V_{SMAX}$$

$$So,\ V_{C2} = V_{SMAX} + V_{SMAX} = 2V_{SMAX}$$



Output Waveform